



Public Radio

While Family Radio Service (FRS) is gaining in popularity, in some respects it is not as useful as the venerable Citizens Band (CB) radio.

By Allan Tarvid

Citizens Band (CB) may be the perfect public radio system for campers. It can be used in a vehicle on the way to your campsite to get directions, information about road and weather conditions ahead, to chat with other motorists, or summon help. It is especially valuable in areas with no cellular phone coverage.

Almost every 18-wheeler on the country's highway system has a CB radio tuned to "highway" Channel 19, and many private vehicles sport CB antennas in rural areas. Law enforcement and emergency service vehicles often carry them, and commercial campgrounds and marinas sometimes monitor certain CB channels.

Most CB radio manufacturers offer models that receive weather channels. Some are capable of warning the user when severe weather alerts are issued. All you have to do is flip a switch to get a forecast or hear the weather warning details.

A CB radio has 40 regular communication channels to choose from. Of these, Channel 9 is reserved for

Citizens Band (CB) radios fit right into the camping lifestyle, providing casual and emergency communication for all members of your group.

emergency use, and the busy Channel 19 is loaded with truckers. However, a quick scan of the other 38 channels should turn up an unused channel that you can select for camp use. A base station set up at the campsite can maintain contact with exploring kids, hikers or fishermen equipped with handheld radios. Portable CB radios are smaller than ever, and easily carried afield. They can be slipped into a daypack, jacket pocket or worn on a belt clip. An extra set of batteries in a sealed plastic bag should accompany the radio.

The campsite station can be a mobile (designed for vehicle mounting) radio in your car or truck, or a similar model mounted on a homemade base. Most CB radios aren't designed for outdoor use and must be protected from rain and dew. A deep-cycle RV battery or one of the new portable power packs designed for emergency jump-starts can provide power.

BROADCAST POWER

CB radio broadcasts are line of sight, meaning that transmissions travel in a straight line from one antenna to the other. Range depends upon the number and composition of obstructions between the antennas.

Short antennas on magnetic-mount bases can be moved from vehicle to vehicle, but won't have the range of longer whips. An 8-foot whip antenna mounted on a vehicle bumper or jury-rigged to a picnic table might reach eight to 10 miles over water to a boat with a similar antenna. If the boater used a handheld radio, the maximum range might shrink to five miles. If both parties used handheld radios the maximum range might be only two or three miles.

The range is usually shorter on land where hills, rock formations and dense foliage may restrict the signal. The maximum range over land is impossible to predict, but expect it to be between two and five miles in open country and one mile or less in hilly or heavily forested terrain. The transmission signals will bounce, which can help you get around obstacles. You might be able to talk to someone behind a hill, for instance, if another hill in the area reflects your signal to the other antenna.

It's not a question of power. Both handheld and base



If using a vehicle-mounted CB for your base camp radio isn't convenient, a simple rig like this will work. A battery box pre-wired with fuses and receptacles can be found in marine outlets or mail-order catalogs.

radios can transmit at the four-watt maximum allowed by law. The difference is in the quality and height of the antennas. The longer an antenna's mast, the more receptive it is. The higher the antenna is mounted, the farther its line of sight and the longer its transmission range.

Height can be used to a camper's advantage. Choosing a campsite on a cliff overlooking the water will enable you to talk to a fisherman at a greater distance than could be reached from a campsite on the beach. The same applies to handheld radios in the field. Moving clear of a hill that's between you and camp or to a high spot will help you reach the base station.

WHAT'S ON THE MARKET

Cherokee Electronics' AH-27F handheld features a button for one-touch emergency access to both Channels 9 and 19. It also stores your five most frequently used channels for quick, one-touch access. A dual-watch monitor allows for automatic monitoring of any two channels. A channel-scan feature scans any of the 40 channels or just the five memory channels. Cherokee says their Battery Life Enhancement Circuitry dramatically extends the talk time for each battery pack. A high/low power switch selects full power or reduced output for short-range communication. A wrist strap and belt clip is standard equipment. Options include a Ni-Cad battery pack and charger, a charging system for the standard battery pack, and a waterproof speaker/microphone. An optional cigarette lighter power cord and an extended-length antenna system adapt the



Cherokee's AH-27F is a full featured, but compact, CB radio.

handheld for use in a vehicle. It lists for \$169.95.

Cherokee's CM-10 mobile radio includes a vehicle battery voltage monitor that would also indicate the condition of a campsite power supply. Features include one-touch access to any seven channels, one-touch scanning of all 40 channels or just the seven memory channels, Dual Watch to spot traffic on any two channels, and instant access to Channels 9 and 19. Suggested retail is \$199.95.

The Cherokee CBS 500 is a tabletop base station with automatic scanning of all channels or any four channels you place in memory. Dual Watch monitors any two channels, and Channels 9 and 19 can be accessed instantly. It has a selectable noise blanker and automatic noise limiting, and lists for \$199.95.



Cherokee Electronics offers a full line of CB radios.

Mobil CBs that also receive weather channels make great base camp radios. They can be used to contact handheld radios in the field to pass on weather forecasts or warnings.



Cobra Electronics offers an extensive CB line, and has announced two new Classic models in their SoundTracker mobile series. The 25 WX ST features a heavy-duty microphone, automatic noise limiter, and instant access to Channels 9 and 19, plus seven NOAA weather channels. Any four channels can be stored in memory and selected with one-button access. A scan feature scans all channels, the four memory channels, or any two channels you select. A weather alert feature can be set to warn the operator when weather alerts are issued even when the radio is turned off. Suggested retail is \$179.95.



Cobra's SoundTracker technology is designed to reduce background noise and minimize the need to use the squelch control.

Cobra's 75 WX ST offers the same features in a different package. The receiver body mounts out of sight, and all controls, including SoundTracker, volume, squelch, and channel scanning, selection and memory are built into the unit's palm-sized microphone. List price is \$159.95.

Cobra's HH-45WX is a shirt-pocket radio that receives all 10 weather channels, has a high/low power switch, battery-saver circuitry, and instant access to Channels 9 and 19, plus any eight memory channels you choose. A Dual Watch feature monitors any two channels and a scan feature scans all 40 channels. A lighter-socket power cord is included and a Ni-Cad battery pack and charger are optional. Suggested retail is \$149.95.

Midland offers about 18 different CB radios, including 10 that receive weather channels. Here are a few of special interest to campers:

The Midland 75-784 Pro Sport XL is an economical handheld radio with high/low power settings, instant access to



Cobra's HH-45WX is an ultra-compact handheld CB that includes a display that can be backlit at night with the press of a button.



Midland's model 75-810 handheld includes all 10 weather channels. The high/low power output switch featured on it and other handhelds saves battery power during short-range communication.

pack for six alkaline batteries are included and a pack for eight rechargeable Ni-Cad batteries is optional. Price is about \$110.

Midland's 75-830 Micro-Mini handheld is for those looking for a small CB. Billed as the world's smallest full-power CB, it is 4 3/4 inches high, 2 inches wide and 1 1/4 inches deep. It receives all 10 weather channels and offers instant access to any five channels you choose and emergency Channel 9. A high/low power switch is featured along with Dual Watch and a low battery indicator. The radio converts from handheld to mobile with an optional adapter. A wrist strap and belt clip is included, and the radio retails for about \$125.

Moving to Midland's mobile CBs, the model 77-113 includes all 10 weather channels, instant access to channel 9 and a high/low power switch for about \$80.

The Midland 77-115 mobile CB includes those features and adds four memory channels with an internal battery backup for memory. It also has a switchable automatic noise limiter. It retails for less than \$100.

Midland's 77-250CXL includes a new transmitter and special ESP circuitry designed to reduce noise and improve signal clarity. It features a

Channel 9 and a Power Save mode. It comes with a lighter socket power plug and a metal belt clip for about \$50.

The Midland 75-805 is a 3-in-1 handheld radio. The unit picks up the 40 CB channels, all 10 weather channels and the conventional FM broadcast band with a built-in memory to store your eight favorite FM stations. It has a high/low power selector, instant access to Channel 9, a 40-channel scan mode and Dual Watch. A lighter socket plug is included for external power and a jack is provided for in-unit battery charging when Ni-Cad batteries are used. Cost is about \$99.

Midland's 75-810 handheld CB receives all 10 weather channels. It has a high/low power switch and features instant access to Channel 9 and two user-selectable memory channels. Last Channel Recall switches to the last channel used. An included lighter socket power plug and a jack for an optional external antenna adapt it for vehicle use. A charge jack lets rechargeable Ni-Cad batteries be charged in the radio. It's priced at about \$79.

The compact Midland 75-820 mini-handheld receives 10 weather channels. It offers instant access to Channel 9 and 19, plus any five other channels you select. A scan option scans all 40 channels or your five memory channels. Memory Scan monitors the channels you use most. Dual Watch lets you monitor any two channels and last channel recall gives instant access to the last channel used. A high/low power switch is included along with an auto power save mode. A carry strap, belt clip and slide-off battery



Midland says their model 75-

830 is the world's smallest full-power CB, yet it has virtually all of the features found on larger handhelds.



Midland's 77-250 CXL includes a transmitter with ESP technology engineered to reduce noise and improve signal clarity.

switchable noise blanker and automatic noise limiter, SWR calibration control to help match the antenna and radio, and instant access to Channels 9 and 19. It retails for about \$120.

The compact Midland 77-285A Power Max III mobile is only 1 7/8 inches high, 6 1/8 inches wide and 5 inches deep. You can set four instant-access memory channels and two more in the Dual Watch feature. Channels 9 and 19 are also instantly available. Switchable noise blanking, scanning and automatic noise limiting are included. It sells for about \$150.

Your local **Radio Shack** store has a large selection of CB radios and antennas. Here's a look at a cross section of their line:

Their top handheld is the TRC-234, which receives all 10 weather channels. It has a high/low power switch, automatic noise limiting and instant access to Channel 9. Options include a lighter socket power plug, Ni-Cad battery charger and home AC adapter. Suggested list is \$149.99.

The Radio Shack TRC-225 handheld offers a high/low power switch and automatically dims the display after showing the channel in use to conserve battery power. A lighter socket power plug is included for \$99.99.

Radio Shack's TRC-222 handheld also has an auto-dimming display and high/low power switch, plus a telescoping antenna and automatic noise limiter for \$79.99.

The company also offers three low-power handhelds for short-range use. They have from one to three CB channels and are priced from \$19.99 to \$49.99.

Radio Shack's top mobile unit is the TRC-498 with digital signal processing that can be used to cut background static or reduce whines and whistles on a crowded channel. It offers instant access to Channel 9 and lists for \$149.99.

The TRC-496 mobile model includes all 10 weather channels. Scanning options include a full 40-channel scan for active channels or full scanning for the first open channel. Dual Watch monitors the two channels of your choice and one-



Like most other handhelds, Radio Shack's TRC-234 CB/weather radio can be powered by replaceable alkaline or rechargeable Ni-Cad batteries.



Weather alert features like that found on this RadioShack model TRC-487 let you know when the weather service broadcasts a severe-weather alert.

touch access to Channel 9 is provided. A switchable noise blanker and automatic noise limiter is included. List is \$119.99.

RadioShack's TRC-487 mobile includes all 10 weather channels and sounds off when a local weather station transmits weather alerts. It also features an automatic noise limiter and retails for \$99.99.

The Deluxe Classic Series TRC-444 mobile radio includes a signal strength/power output meter, a noise blanker and instant access to Channel 9. It sells for \$99.99.

Also from RadioShack is the model TRC-442 Sports mobile CB. This



The RadioShack TRC-442 Sport is one of the few CBs designed for extremely sturdy outdoor use — its microphone and radio case have gaskets to seal out the elements.

basic unit is compact and sealed against sand, dust and moisture for use outdoors on boats, motorcycles and three- and four-wheelers. Suggested retail is \$79.99.

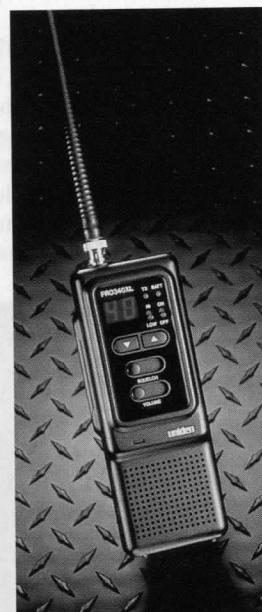
The top handheld CB from **Uniden** is the Pro 350XL. It scans all NOAA weather channels and all 40 CB channels. Other features include Dual Watch, instant access to Channels 9 and 19, high/low power switch, low battery indicator, a belt clip and lighter socket power cord. List price is \$169.95.

Uniden's Pro 340 XL handheld is compact and has a high/low power switch, low battery indicator, belt clip and lighter socket power cord. Suggested list is \$89.95.

The Uniden PC76XLW mobile radio includes all NOAA weather channels and a weather alert that lets you know when severe weather warnings are issued. Channel 9 can be accessed with the flip of a switch. A delta-tune control fine tunes the receiver, and a noise blanker and



Radios near the top of a company's line, such as this Uniden PC76XL, have more manual adjustments that can be precisely tuned to enhance performance.



Uniden's Pro 340 XL portable CB uses sliding controls for volume and squelch rather than traditional knobs.

automatic noise limiter are included to reduce interference. An SWR tuning feature lets you match the antenna and transceiver. An antenna warning light indicates an improperly tuned antenna. Suggested list is \$189.95, and a similar unit, the PC76XL is available without weather channels for \$179.95. Remove the SWR calibration capability and the delta tune feature, and you have the Uniden PC66XL listing at \$139.95.

The Uniden Pro 538W mobile CB includes the three most popular U.S. weather channels and offers one-button access to Channel 9. The speaker is mounted in front rather than on the case's bottom, making the radio easier to hear in noisy environments. Suggested list is \$109.95.

Uniden's Pro 520XL is a compact mobile radio that includes instant access to Channel 9, and a switchable automatic noise limiter. It lists for \$89.95.

The Uniden Pro 501XL is a compact, basic mobile unit with a built-in automatic noise limiter with a suggested list price of \$49.95. ▲

SOURCES

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